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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,453	12/11/2003	Claude R. Gunter	TAYL 205 US (10315365)	2036

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EXAMINER	
GAKH, YELENA G	

ART UNIT	PAPER NUMBER
1743	

MAIL DATE	DELIVERY MODE
06/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/735,453	GUNTER ET AL.	
	Examiner	Art Unit	
	Yelena G. Gakh, Ph.D.	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/03/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the apparatus comprising at least one other reagent suitable for determining a second analyte. It is totally unclear, as to what type of the reagent and/or what type of the analyte is meant in the claim. The subject matter of the claim is so indefinite that it prevents the examiner from searching the relevant prior art.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 1-2, 6-8, 12-13 and 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupe (US 4,855,239, IDS).

Rupe teaches "test composition and device for the determination of cyanuric acid in water": "a colorimetric test reagent composition is presented for determining the amount of cyanuric acid in water. Cyanuric acid is added to outdoor swimming pool water to stabilize the chlorine added as a sanitizer. Basically the test composition utilizes melamine and an indicator material, which responds to a change in pH of the test environment caused by the action of cynanuric acid on the reagent composition. Preferably the test composition is incorporated in a porous matrix which results in a convenient solid state test device" (Abstract). "In preparing the compositions of the present invention, consideration must be given to the selection of indicator materials and the concentration of melamine in the test composition. As previously indicated, the test compositions should be adjusted to a pH of either from *about 5 to about 7* or from *about 7 to about 8*. In view of this, the indicator must accordingly be selected to change color when the pH of the test environment either increases or decreases. Indicators such as methyl red, *phenol red*, thymol blue, bromthymol blue, *cresol red*, metacresol purple and mixtures thereof may be selected as color forming agents" (col. 2, lines 64-68, col.3, lines 1-7). "It is preferable to incorporate the reagent composition into a solid state matrix so that the formation of precipitate does not hinder in the estimation of the color change. Examples of matrix materials which can be utilized are filter paper, glass fibers, cellulosic materials, synthetic fibers, polymers, particulate inorganic materials, and so forth. The matrix must however be impervious to and not react with the fluid being tested and must be reasonably hydrophilic and porous so that the fluid being tested wets the matrix and the analyte contained therein, i.e. cyanuric acid, reacts with the incorporated reagent composition" (col. 3, lines 21-32).

Rupe does not specifically disclose 2,4-diamino-6-alkyl-1,3,5-triazine, since melamine is 2,4,6-triamino-1,3,5-triazine. 2,4-Diamino-6-alkyl-1,3,5-triazine, however, has close structure and properties to melamine, with one amino-group out if three replaced with alkyl, in particular

methyl. Therefore it would have been obvious for any person of ordinary skill in the art to use the analogous compound to melamine in the same test strip and method as disclosed by Rupe, because it would have led to expected results at the expected level of success.

7. **Claims 4-5 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupe in view of the conventional additives used in the swimming pools ("Best swimming pool supplied guide", 2004).

While Rupe does not specifically disclose antioxidant sodium thiosulfate, it is a conventional additive for the swimming pool "used to neutralize or dechlorinate pool and spa water". It would have been obvious for any person of ordinary skill in the art to add sodium thiosulfate to Rupe's reagent composition used for detecting cyanuric acid in the swimming pool in order to dechlorinate the water sample and thus prevent potential interference with detection of cyanuric acid and/or degrading the test strip in oxidizing environment.

8. **Claims 1-3, 6-9, 13 and 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sellapperumage (US 6,432,717, IDS).

Sellapperumage discloses "stabilized test composition, device and method for the determination of cyanuric acid in water", which comprises improved test device and method over Rupe, since the composition comprises, besides melamine and pH indicator of Rupe a stabilizer form the group of compounds containing alcohol or ketone groups, such as polyethylene glycol (PEG), ethylene glycol, glycerol, etc, (col. 3, lines 56-58). Polypropylene glycol belongs to the same groups and is similar to ethylene glycole and glycerol.

Sellapperumage uses melamine, rather than 2,4-Diamino-6-alkyl-1,3,5-triazine, as the component of his composition. As it was indicated above melamine and 2,4-Diamino-6-alkyl-1,3,5-triazine have similar structures and properties toward cyanuric acid. Therefore it would have been obvious for any person of ordinary skill in the art to use the analogous compound to melamine in the same test strip and method as disclosed by Sellapperumage, because it would have led to expected results with the expected level of success.

9. **Claims 4-5 and 10-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sellapperumage in view of the conventional additives used in the swimming pools ("Best swimming pool supplied guide", 2004).

While Sellapperumage does not specifically disclose antioxidant sodium thiosulfate, it is a conventional additive for the swimming pool "used to neutralize or dechlorinate pool and spa water". It would have been obvious for any person of ordinary skill in the art to add sodium thiosulfate to Sellapperumage's reagent composition used for detecting cyanuric acid in the swimming pool in order to dechlorinate the water sample and thus prevent potential interference with detection of cyanuric acid and/or degrading the test strip in oxidizing environment

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (571) 272-1257. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

6/18/07

Yelena Gakh

YELENA GAKH
PRIMARY EXAMINER